

REMARKS

This Response, submitted in reply to the Office Action dated September 20, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-22 are pending in the present application.

I. Preliminary Matter

Applicant respectfully requests that the Examiner approve the drawings filed January 31, 2001, by marking acceptance of the drawings in the next Office Action.

II. Claim Rejections under 35 U.S.C. § 103

Claims 1-22 have been rejected under 35 U.S.C. § 103(a) as being anticipated by Stavely et al. (U.S. Patent No. 5,969,372) in view of Yajima et al. (U.S. Patent No. 4,074,231).

Claim 1

Claim 1 recites “performing **preprocessing** for the blemish elimination processing on said **defective image** while reading photoelectrically said image.” The Examiner cites Stavely col. 5, lines 60-65 for teaching this aspect of the claim.

The respective column and lines cited by the Examiner disclose performing image processing for each scan line to remove image areas from a white light scan **corresponding to** low intensity areas in an infrared scan. Image processing software is used to fill the resulting blank areas **in the white scan** with colors corresponding to the surrounding areas. However, the

image processing is not preprocessing as claimed. In particular, it appears that the image processing performed in Stavely, is performed to obtain an actual image free of low intensity areas as opposed to **preprocessing**.

Assuming *arguendo*, the image processing of Stavely teaches the claimed preprocessing, the image processing of Stavely is performed on image areas in a white line scan which is a normal image (actual image) and not a defective image (infrared image). See col. 4, lines 20-28. The image processing is performed on the white line scan and corresponds to low intensity areas in the infrared scan.

The Examiner's emphasis on the infrared scan image does not correct any deficiency in the rejection. The mere fact that an infrared or defective image is created does not require preprocess blemish correction on that defective image. Rather, Stavely uses the infrared image as a template or guide to correct the normal image but the defective image (e.g. the template or guide) is not itself corrected.

Further, edge enhancement pre-processing cannot be disclosed in col. 5, lines 60-65 of Stavely. In particular, the respective column and lines of Stavely disclose image processing techniques used to limit image correction to larger features of the image ignoring small scattered points of low intensity and noise in the infrared scan. On the other hand, edge enhancement processing is a process to emphasize a sudden change in image signals (noise and regionally varying scattered points). If edge enhancement processing is performed on the defective image as an image processing in Stavely, the small scattered points of low intensity and noise in the

infrared scan, which should be ignored according to the description of Stavely, will be emphasized to an unignorable level. This would consequently lead to a failure in limiting image correction to larger features of the image, as described in Stavely, because of enhanced small scattered points of low intensity and noise in the infrared scan image. Thus, it is clear that the edge enhancement processing cannot be included in the image processing described in col. 5, lines 60-65 of Stavely.

Further, in claim 1, the defective image is subjected to edge enhancement processing so as to emphasize a boundary of an edge of a defective portion and define the position of the defect, and not to limit image correction to larger features. Accordingly, performing preprocessing including edge enhancement processing which emphasizes small scattered points of low intensity is pointless in Stavely, which limits image correction to larger features of the image. Therefore, assuming Yajima discloses the claimed edge enhancement processing, based on the foregoing, one of ordinary skill in the art would not be motivated to combine Yajima with Stavely.

Furthermore, claim 1 recites “performing preprocessing for the blemish elimination processing on said defective image **while reading photoelectrically said image.**” The Examiner has not established where this aspect of the claim is disclosed in the cited art. Further, Stavely does not teach or suggest this aspect of claim 1. Although Stavely states that the order of Scan A and Scan B is not important (col. 4 lines 24-25), this merely suggests that the order of Scan A and B is not important, and does not define the order or chronological relationship between preprocessing of the defective image by Scan B and the reading by Scan A. There is no

description of performing preprocessing in the reading of Scan A to the image of Scan B read prior to Scan A. Moreover, there is no disclosure of preprocessing being finished by the time the actual image is obtained as defined in claim 2.

Claim 1 further recites “performing the blemish elimination processing on a blemish of said actual image, **based on the defective image subjected to said preprocessing.**” The Examiner cites Stavely col. 4, lines 19-24 for teaching this aspect of the claim. The respective column and lines cited by the Examiner discloses scanning a normal image (Scan A) using direct white light, producing an image to be corrected. Scan B is then performed to provide a defect signature (an image of the surface defects) which is then used by image processing software to suitably alter corresponding areas in the first scan (Scan A). There is no teaching or suggestion that blemish elimination processing is performed on an actual image (Scan A), based on the defective image (Scan B) subjected to said preprocessing (image processing as cited by the Examiner). In particular, it is unclear what is being cited by the Examiner for teaching the claimed blemish elimination processing since Stavely appears to at most disclose image processing (preprocessing as cited by the Examiner). Further, the Examiner’s reasoning is circular since the Examiner appears to be asserting that image processing is performed on areas in a first scan (Scan A) based on the image processing that was performed in the first scan.

Claim 1 also recites “wherein said preprocessing comprises edge enhancement processing.” The Examiner concedes that Stavely does not teach this aspect of the claim and cites Yajima, col. 2, lines 41-48, to cure the deficiency. The respective column and lines cited by the Examiner describes a pattern processing system which enhances the edge of a line without

being influenced by noise on ground paper with characteristics depicted thereon. However, Applicant submits that it would not be obvious to one of ordinary skill in the art to combine the edge enhancement in a system for recognizing printed characters and hand-written characters of Yajima with the film scanner of Stavely.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable. To the extent claim 7 recites similar elements, claim 7 and its dependent claims should be deemed allowable for at least the same reasons.

Claims 5, 8, 4 and 10

The Examiner asserts that the defect signature information (an image of the surface defects) of Stavely is analogous to the flag information as recited in claims 5 and 8. The Examiner then asserts that the image of surface defects from the infrared image is analogous to the evaluated result as recited in claims 4 and 10. However, the defect signature information and an image of the surface defects refer to the same aspect of Stavely. Since the Examiner is citing the same aspect of the reference for teaching different aspects of the claims, Applicant respectfully requests that the Examiner cite other aspects of the prior art, or cite new prior art for teaching the separate and distinct claim elements.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

RESPONSE UNDER 37 C.F.R. § 1.116
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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

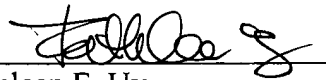
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